

Data Validation Checklist
Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: TestAmerica - Savannah, GA¹
 Method: SW-846 8270D Low-Level (PAH)
 Matrix: Soil
 Reviewer: Karen Marie Trujillo
 Concurrence²: Martha Meyers-Lee

Project No: 15268508.20000
 Job ID.: 680-85860-2
 Associated Samples: Refer to Attachment A (Sample Summary)
 Samples Collected: 12/13/2012
 Date: 1/29/2013
 Date: 03/01/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (\leq 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; \leq 40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.		✓			
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 121112-RB-Shovel (680-85731-47).	
		✓		According to the QAPP, a rinsate blank is to be	

¹ All analytical work subcontracted to TestAmerica of Tallahassee, FL

² Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.				collected after each decontamination event, which occurs once per week per the client. A rinsate blank (121112-RB-Shovel) was collected during the week of 12/10/12. The rinsate blank was analyzed for PAHs under Test America Job ID 680-85731-47.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			<ul style="list-style-type: none"> • CV0266A-CSD (680-85860-26) and CV0266A-CS (680-85860-25) • CV0511BBBB-CSD (680-85860-31) and CV0511BBBB-CS (680-85860-30) 	
15. Was precision deemed acceptable as defined by the project plans?		✓		Refer to Attachment B (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			<p>Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.</p> <p>The laboratory was notified that the Form Vs included in the data package of 12/29/2012 were incomplete and contained transcription errors. Revised Form Vs were provided by the laboratory on 02/14/2013 (refer to Attachment C).</p>	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> • Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			<ul style="list-style-type: none"> • Instrument ID: TSMC5973 • Initial Calibration: 12/23/2012 • ICV: 12/23/12 @ 14:44 • CCV: 12/27/12 @ 08:25 & 12/28/12 @ 08:32 	
19. Were calibration results within laboratory/project		✓		ICV of 12/23/12 @ 14:44: Dibenz(a,h)anthracene @	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
specifications? <ul style="list-style-type: none"> • ICAL (Criteria: ≤ 15 mean %RSD with no individual CCC %RSD ≤ 30 ($\leq 50\%$ for poor performers), OR $r \geq 0.995$, OR $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> ◦ If %RSD > 15 ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J-flag positive results and UJ-flag non-detects ◦ If mean RRF < 0.050 (< 0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: $\leq 20\%D$ ($\leq 50\%$ for poor performers) and RF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> ◦ If %D > 20 ($> 50\%$ for poor performers), then J-flag positive results and UJ-flag non-detects ◦ If RF < 0.050 (< 0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds 				-23.4 percent difference (%D) (Laboratory: $\leq 30.0\%D$, Project: $\leq 20\%D$). J-Flag all positive results, because the %D between calibration response factors is indicative of a positive bias. Qualification of ND results is not warranted.	
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R > Upper Control Limit (UCL) and J/R-flag results when %R < Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects	✓				
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			Prep Batch 98151: 680-85860-25 (CV0266A-CS), MS/MSD	
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples are evaluated.</i> <ul style="list-style-type: none"> • If the native sample concentration $> 4x$ spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted. • MS and MSD %R < 10: J and R Flag positive and ND results, respectively • MS and MSD %R > 10 and $< LCL$: J-Flag positive and UJ-flag non-detect results 		✓		CV0266A-CS (680-85860-25): <ul style="list-style-type: none"> • Acenaphthene MSD %R was 141 (30-100). Qualification of data is not required, because the MS %R (68) fell within control limits • Anthracene MSD %R was 276 (33-100). Qualification of data is not required, because the MS %R (52) fell within control limits • Benzo[a]anthracene MS and MSD %R were -29 and 774, respectively (24-120). J-flag • Benzo[a]pyrene @ -133 and 1072 (19-138). An evaluation of interference is not possible³. 	J

³ Native sample concentration is more than four times the spiking level.

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
<ul style="list-style-type: none"> MS and MSD R% >UCL (or 140): J-Flag positive results 				<ul style="list-style-type: none"> Benzo[b]fluoranthene @ -173 and 1366 (26-124). An evaluation of interference is not possible³. Benzo[g,h,i]perlylene @ -267 and 374 %R (10-129). An evaluation of interference is not possible³. Benzo[k]fluoranthene MS and MSD %R were 5 and 649, respectively (27-126). J-Flag Chrysene @ -191 and 762 (26-121). An evaluation of interference is not possible³. Dibenz(a,h)anthracene MSD %R was 203 (10-123). Qualification of data is not required, because the MS %R (14) fell within control limits Fluoranthene @ -100 and 1085 (21-122). An evaluation of interference is not possible³. Indeno[1,2,3-cd]pyrene MS and MSD %R were -62 and 619, respectively (10-125). J-Flag Naphthalene MSD %R was 108 (27-100). Qualification of data is not required, because the MS %R (61) fell within control limits Phenanthrene MS and MSD %R were -32 and 843, respectively (29-110). J-Flag Pyrene MS and MSD %R were -94 and 819, respectively (19-129). J-Flag <p>Results for field duplicate sample (CV0266A-CSD (680-85860-26)) were also qualified as indicated above due to the presence of matrix interference.</p>	
<p>26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples are evaluated.</i></p> <ul style="list-style-type: none"> If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 	✓			<p>CV0266A-CS (680-85860-25):</p> <ul style="list-style-type: none"> Acenaphthene @ 64%RPD (\leq45). J-Flag Anthracene @ 105%RPD (\leq33). J-Flag Benzo[a]anthracene @ 124%RPD (\leq39). J-Flag Benzo[a]pyrene @ 135%RPD (\leq44). An evaluation of interference is not possible³. Benzo[b]fluoranthene @ 132%RPD (\leq34). An evaluation of interference is not possible³. Benzo[g,h,i]perlylene @ 133%RPD (\leq40). An evaluation of interference is not possible³. Benzo[k]fluoranthene @ 126%RPD (\leq36). J-Flag Chrysene @ 120 %RPD (\leq33). An evaluation of interference is not possible³. 	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				<ul style="list-style-type: none"> • Dibenz(a,h)anthracene @ 103%RPD (≤ 40). J-Flag • Fluoranthene @ 124%RPD (≤ 37). An evaluation of interference is not possible³. • Fluorene @ 44%RPD (≤ 38). J-Flag • Indeno[1,2,3-cd]pyrene @ 132%RPD (≤ 40). J-Flag • Phenanthrene @ 131%RPD (≤ 36). J-Flag • Pyrene @ 122%RPD (< 37). J-flag <p>Results for field duplicate sample (CV0266A-CSD (680-85860-26)) were also qualified as indicated above due to the presence of matrix interference.</p>	
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none"> • If %R for 1 Acid or BN surrogates < 10, then J-flag positive and R-flag non-detect associated sample results • If 2 or more Acid or BN %R $> UCL$, then J-flag positive results • If 2 or more Acid or BN %R $\geq 10\%$, but $< LCL$, then J-flag positive results and UJ-flag non-detect results • If 2 or more Acid or BN , with 1 %R $> UCL$ and 1 %R $\geq 10\%$, but $< LCL$, then J-flag positive results and UJ-flag non-detect results 	✓			o-Terphenyl recovered outside the surrogate recovery criteria for the following samples: <ul style="list-style-type: none"> • CV0511TT-CS (680-85860-24), DF=25: 0%R (39-100) • CV0511BBB-CS (680-85860-30), DF=25: 0% (39-100) <p>Qualification of PAH results in the above-mentioned samples due to zero surrogate recovery is not required, because the surrogate was not recovered due to sample dilution.</p>	None
28. Were internal standard (IS) results within lab/project specifications? <ul style="list-style-type: none"> • If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results • If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results • If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results • If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. • The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may 	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.					
29. Were lab comments included in report?	✓			Refer to Attachment D (Case Narrative)	
Comments: The data validation was conducted in accordance with the <i>Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1</i> (OTIE, October 2012). The data review process was modeled after the <i>USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review</i> (EPA, October 1999) and <i>USEPA CLP NFG for Low Concentration Organic Methods Data Review</i> (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment E). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
 R The sample results are unusable. The analyte may or may not be present in the sample.
 U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
 UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A
SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-85860-21	CV0511QQ-CS	Solid	12/13/12 09:56	12/15/12 10:03
680-85860-22	CV0511RR-CS	Solid	12/13/12 10:27	12/15/12 10:03
680-85860-23	CV0511SS-CS	Solid	12/13/12 10:23	12/15/12 10:03
680-85860-24	CV0511TT-CS	Solid	12/13/12 10:24	12/15/12 10:03
680-85860-25	CV0266A-CS	Solid	12/13/12 12:50	12/15/12 10:03
680-85860-26	CV0266A-CSD	Solid	12/13/12 12:55	12/15/12 10:03
680-85860-27	CV0266B-CS	Solid	12/13/12 13:12	12/15/12 10:03
680-85860-28	CV0266C-CS	Solid	12/13/12 13:09	12/15/12 10:03
680-85860-29	CV0511AAA-CS	Solid	12/13/12 13:34	12/15/12 10:03
680-85860-30	CV0511BBB-CS	Solid	12/13/12 13:33	12/15/12 10:03
680-85860-31	CV0511BBB-CSD	Solid	12/13/12 13:33	12/15/12 10:03
680-85860-32	CV0511CCC-CS	Solid	12/13/12 13:36	12/15/12 10:03
680-85860-33	CV0511DDD-CS	Solid	12/13/12 13:57	12/15/12 10:03
680-85860-34	CV0511EEE-CS	Solid	12/13/12 14:00	12/15/12 10:03
680-85860-35	CV0511FFF-CS	Solid	12/13/12 14:02	12/15/12 10:03
680-85860-36	CV0511GGG-CS	Solid	12/13/12 14:34	12/15/12 10:03
680-85860-37	CV0511HHH-CS	Solid	12/13/12 14:33	12/15/12 10:03
680-85860-38	CV0511III-CS	Solid	12/13/12 13:32	12/15/12 10:03
680-85860-39	CV0511JJJ-CS	Solid	12/13/12 14:50	12/15/12 10:03
680-85860-40	CV0511KKK-CS	Solid	12/13/12 14:56	12/15/12 10:03

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ATTACHMENT B

FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results

Attachment B

Analyte	CV0266A-CS 680-85860-25	RL	CV0266A-CSD 680-85860-26	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene	17	17	79	34	µg/kg	127.5	NA	62	51	J/UJ-flag, absolute difference > 2x Avg RL
Acenaphthylene	40	17	14 J	34	µg/kg	127.5	NA	26	51	None, absolute difference ≤ 2x Avg RL
Anthracene	92	17	140	34	µg/kg	127.5	NA	48	51	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	470	17	780	34	µg/kg	127.5	50	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	850	17	870	34	µg/kg	127.5	2	NA	NA	None, RPD ≤ 50%
Benzo(b)fluoranthene	1300	17	1200	34	µg/kg	127.5	8	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	570	17	550	34	µg/kg	127.5	4	NA	NA	None, RPD ≤ 50%
Benzo(k)fluoranthene	370	17	430	34	µg/kg	127.5	15	NA	NA	None, RPD ≤ 50%
Chrysene	890	17	920	34	µg/kg	127.5	3	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	120	17	170	34	µg/kg	127.5	NA	50	51	None, absolute difference ≤ 2x Avg RL
Fluoranthene	770	17	1700	34	µg/kg	127.5	75	NA	NA	J/UJ-flag, RPD > 50%
Fluorene	24	17	55	34	µg/kg	127.5	NA	31	51	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	340	17	610	34	µg/kg	127.5	57	NA	NA	J/UJ-flag, RPD > 50%
1-Methylnaphthalene	91	17	18 J	34	µg/kg	127.5	NA	73	51	J/UJ-flag, absolute difference > 2x Avg RL
2-Methylnaphthalene	100	17	22 J	34	µg/kg	127.5	NA	78	51	J/UJ-flag, absolute difference > 2x Avg RL
Naphthalene	74	17	19 J	34	µg/kg	127.5	NA	55	51	J/UJ-flag, absolute difference > 2x Avg RL
Phenanthrene	450	17	820	34	µg/kg	127.5	58	NA	NA	J/UJ-flag, RPD > 50%
Pyrene	660	17	1300	34	µg/kg	127.5	65	NA	NA	J/UJ-flag, RPD > 50%

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

Evaluation of Field Duplicate Results

Attachment B

Analyte	CV0511BBB-CS 680-85860-30	RL	CV0511BBB-CSD 680-85860-31	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action			
Acenaphthene	1700	210		9.3	8.1	µg/kg	545.25	NA	1690.7	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Acenaphthylene	24	J	210		3.6	J	8.1	µg/kg	545.25	NA	20.4	218.1	None, absolute difference \leq 2x Avg RL
Anthracene	2700	210		12	8.1	µg/kg	545.25	NA	2688	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Benzo(a)anthracene	6900	210		63	8.1	µg/kg	545.25	NA	6837	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Benzo(a)pyrene	6600	210		73	8.1	µg/kg	545.25	NA	6527	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Benzo(b)fluoranthene	8200	210		120	8.1	µg/kg	545.25	NA	8080	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Benzo(g,h,i)perylene	3800	210		25	8.1	µg/kg	545.25	NA	3775	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Benzo(k)fluoranthene	3500	210		43	8.1	µg/kg	545.25	NA	3457	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Chrysene	7100	210		84	8.1	µg/kg	545.25	NA	7016	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Dibenzo(a,h)anthracene	1300	210		9.6	8.1	µg/kg	545.25	NA	1290.4	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Fluoranthene	16000	210		150	8.1	µg/kg	545.25	NA	15850	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Fluorene	1200	210		5.3	J	8.1	µg/kg	545.25	NA	1194.7	218.1	J/UJ-flag, absolute difference > 2x Avg RL	
Indeno(1,2,3-cd)pyrene	4500	210		32	8.1	µg/kg	545.25	NA	4468	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
1-Methylnaphthalene	66	J	210		9.1	8.1	µg/kg	545.25	NA	56.9	218.1	None, absolute difference \leq 2x Avg RL	
2-Methylnaphthalene	66	J	210		11	8.1	µg/kg	545.25	NA	55	218.1	None, absolute difference \leq 2x Avg RL	
Naphthalene	61	J	210		9.9	8.1	µg/kg	545.25	NA	51.1	218.1	None, absolute difference \leq 2x Avg RL	
Phenanthrene	13000	210		76	8.1	µg/kg	545.25	NA	12924	218.1	J/UJ-flag, absolute difference > 2x Avg RL		
Pyrene	13000	210		100	8.1	µg/kg	545.25	NA	12900	218.1	J/UJ-flag, absolute difference > 2x Avg RL		

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

DATA PACKAGE ADDENDUM

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tallahassee

Job No.: 680-85860-2

SDG No.: 68085860-2

Lab File ID: C2122301.D

DFTPP Injection Date: 12/23/2012

Instrument ID: SMC

DFTPP Injection Time: 11:41

Analysis Batch No.: 98254

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	54.1
68	Less than 2.0 % of mass 69	0.3 (0.6)1
69	Mass 69 relative abundance	45.5
70	Less than 2.0 % of mass 69	0.3 (0.6)1
127	10.0 - 80.0 % of mass 442	51.9
197	Less than 2.0 % of mass 198	0.5 (0.4)2
198	Greater than 50.0 % of mass 442	112.3
199	5.0 - 9.0 % of mass 198	7.5 (6.7)2
275	10.0 - 60.0 % of mass 442	28.0
365	Greater than 1.0 % of mass 442	5.2
441	Present but less than mass 443	14.8
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	19.6

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 640-98254/2	C2122302.D	12/23/2012	11:54
	IC 640-98254/3	C2122303.D	12/23/2012	12:13
	IC 640-98254/4	C2122304.D	12/23/2012	12:32
	IC 640-98254/5	C2122305.D	12/23/2012	12:51
	ICIS 640-98254/6	C2122306.D	12/23/2012	13:09
	IC 640-98254/7	C2122307.D	12/23/2012	13:28
	IC 640-98254/8	C2122308.D	12/23/2012	13:47
	IC 640-98254/9	C2122309.D	12/23/2012	14:06
	IC 640-98254/10	C2122310.D	12/23/2012	14:25
	ICV 640-98254/11	C2122311.D	12/23/2012	14:44

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tallahassee

Job No.: 680-85860-2

SDG No.: 68085860-2

Lab File ID: C2122704.D

DFTPP Injection Date: 12/27/2012

Instrument ID: SMC

DFTPP Injection Time: 08:12

Analysis Batch No.: 98300

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	50.2
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	44.0
70	Less than 2.0 % of mass 69	0.0 (0.0)1
127	10.0 - 80.0 % of mass 442	51.6
197	Less than 2.0 % of mass 198	0.6 (0.6)2
198	Greater than 50.0 % of mass 442	114.2
199	5.0 - 9.0 % of mass 198	7.3 (6.4)2
275	10.0 - 60.0 % of mass 442	30.3
365	Greater than 1.0 % of mass 442	4.9
441	Present but less than mass 443	15.5
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	20.0

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 640-98300/2	C2122705.D	12/27/2012	08:25
	MB 640-98151/1-A	C2122716.D	12/27/2012	11:54
	LCS 640-98151/2-A	C2122717.D	12/27/2012	12:13
	LCSD 640-98151/3-A	C2122718.D	12/27/2012	12:32
CV0266A-CS MS	680-85860-25MS MS	C2122720.D	12/27/2012	13:10
CV0266A-CS MSD	680-85860-25 MSD	C2122721.D	12/27/2012	13:29
CV0511RR-CS	680-85860-22	C2122724.D	12/27/2012	14:26
CV0511BBB-CSD	680-85860-31	C2122732.D	12/27/2012	16:58
CV0511CCC-CS	680-85860-32	C2122733.D	12/27/2012	17:17
CV0511DDD-CS	680-85860-33	C2122734.D	12/27/2012	17:36
CV0511EEE-CS	680-85860-34	C2122735.D	12/27/2012	17:55
CV0511HHH-CS	680-85860-37	C2122738.D	12/27/2012	18:52
CV0511KKK-CS	680-85860-40	C2122741.D	12/27/2012	19:49
CV0511QQ-CS	680-85860-21	C2122742.D	12/27/2012	20:08

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Tallahassee

Job No.: 680-85860-2

SDG No.: 68085860-2

Lab File ID: C2122804.D

DFTPP Injection Date: 12/28/2012

Instrument ID: SMC

DFTPP Injection Time: 08:19

Analysis Batch No.: 98318

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	54.6
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	40.6
70	Less than 2.0 % of mass 69	0.6 (1.4)1
127	10.0 - 80.0 % of mass 442	54.5
197	Less than 2.0 % of mass 198	0.1 (0.1)2
198	Greater than 50.0 % of mass 442	108.0
199	5.0 - 9.0 % of mass 198	6.6 (6.2)2
275	10.0 - 60.0 % of mass 442	27.8
365	Greater than 1.0 % of mass 442	5.3
441	Present but less than mass 443	15.9
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	19.2

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 640-98318/2	C2122805.D	12/28/2012	08:32
CV0511SS-CS	680-85860-23	C2122807.D	12/28/2012	09:09
CV0511TT-CS	680-85860-24	C2122808.D	12/28/2012	09:28
CV0266A-CSD	680-85860-26	C2122809.D	12/28/2012	09:47
CV0511BBB-CS	680-85860-30	C2122810.D	12/28/2012	10:06
CV0511FFF-CS	680-85860-35	C2122811.D	12/28/2012	10:25
CV0511GGG-CS	680-85860-36	C2122812.D	12/28/2012	10:44
CV0511III-CS	680-85860-38	C2122813.D	12/28/2012	11:03
CV0511JJJ-CS	680-85860-39	C2122814.D	12/28/2012	11:22
CV0266A-CS	680-85860-25	C2122815.D	12/28/2012	11:41
CV0266B-CS	680-85860-27	C2122816.D	12/28/2012	12:00
CV0266C-CS	680-85860-28	C2122817.D	12/28/2012	12:19
CV0511AAA-CS	680-85860-29	C2122818.D	12/28/2012	12:38

ATTACHMENT D

CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
SDG: 68085860-2

Job ID: 680-85860-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-85860-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/15/2012; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.6° C, 4.2° C and 5.6° C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples CV0511QQ-CS (680-85860-21), CV0511RR-CS (680-85860-22), CV0511SS-CS (680-85860-23), CV0511TT-CS (680-85860-24), CV0266A-CS (680-85860-25), CV0266A-CSD (680-85860-26), CV0266B-CS (680-85860-27), CV0266C-CS (680-85860-28), CV0511AAA-CS (680-85860-29), CV0511BBB-CS (680-85860-30), CV0511BBB-CSD (680-85860-31), CV0511CCC-CS (680-85860-32), CV0511DDD-CS (680-85860-33), CV0511EEE-CS (680-85860-34), CV0511FFF-CS (680-85860-35), CV0511GGG-CS (680-85860-36), CV0511HHH-CS (680-85860-37), CV0511III-CS (680-85860-38), CV0511JJJ-CS (680-85860-39) and CV0511KKK-CS (680-85860-40) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 12/18/2012 and analyzed on 12/27/2012 and 12/28/2012.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: the internal standard (ISTD) was raised to 40 ppm from 2.0 ppm.

Samples CV0511QQ-CS (680-85860-21)[2X], CV0511SS-CS (680-85860-23)[4X], CV0511TT-CS (680-85860-24)[25X], CV0266A-CS (680-85860-25)[2X], CV0266A-CSD (680-85860-26)[4X], CV0511BBB-CS (680-85860-30)[25X], CV0511FFF-CS (680-85860-35)[2X], CV0511GGG-CS (680-85860-36)[5X], CV0511HHH-CS (680-85860-37)[5X], CV0511III-CS (680-85860-38)[2X] and CV0511JJJ-CS (680-85860-39)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly. o-Terphenyl (Surr) recovered the surrogate recovery criteria low for CV0511TT-CS (680-85860-24). o-Terphenyl recovered outside the surrogate recovery criteria for CV0511TT-CS (680-85860-24) and CV0511BBB-CS (680-85860-30) as they were diluted beyond the quantitation limit.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample CV0266A-CS (680-85860-25) in batch 640-98300. Several analytes exceeded the rpd limit.

Refer to the QC report for details.

No other difficulties were encountered during the low level SVOC analyses.

All other quality control parameters were within the acceptance limits.

ATTACHMENT E

QUALIFIED SAMPLE RESULTS

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511QQ-CS

Date Collected: 12/13/12 09:56

Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-21

Matrix: Solid

Percent Solids: 66.2

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	65		20	1.7	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Acenaphthylene	18 J		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Anthracene	150		20	2.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Benzo[a]anthracene	590		20	1.9	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Benzo[a]pyrene	650		20	2.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Benzo[b]fluoranthene	1000		20	2.8	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Benzo[g,h,i]perylene	210		20	3.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Benzo[k]fluoranthene	360		20	1.9	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Chrysene	680		20	2.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Dibenz(a,h)anthracene	86 J		20	2.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Fluoranthene	1200		20	1.8	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Fluorene	53		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Indeno[1,2,3-cd]pyrene	260		20	3.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
1-Methylnaphthalene	24		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
2-Methylnaphthalene	29		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Naphthalene	23		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Phenanthrene	640		20	1.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Pyrene	840		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 20:08	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		39 - 100				12/18/12 15:52	12/27/12 20:08	2

Client Sample ID: CV0511RR-CS

Date Collected: 12/13/12 10:27

Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-22

Matrix: Solid

Percent Solids: 75.1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	32		8.7	0.75	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Acenaphthylene	10		8.7	0.69	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Anthracene	77		8.7	0.86	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Benzo[a]anthracene	280		8.7	0.80	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Benzo[a]pyrene	330		8.7	0.88	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Benzo[b]fluoranthene	470		8.7	1.2	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Benzo[g,h,i]perylene	140		8.7	1.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Benzo[k]fluoranthene	170		8.7	0.83	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Chrysene	330		8.7	0.97	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Dibenz(a,h)anthracene	51 J		8.7	0.84	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Fluoranthene	560		8.7	0.78	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Fluorene	25		8.7	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Indeno[1,2,3-cd]pyrene	170		8.7	1.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
1-Methylnaphthalene	19		8.7	0.69	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
2-Methylnaphthalene	20		8.7	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Naphthalene	16		8.7	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Phenanthrene	330		8.7	0.57	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Pyrene	410		8.7	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	73		39 - 100				12/18/12 15:52	12/27/12 14:26	1

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511SS-CS

Date Collected: 12/13/12 10:23
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-23

Matrix: Solid
 Percent Solids: 73.9

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110		36	3.1	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Acenaphthylene	34 J		36	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Anthracene	340		36	3.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Benzo[a]anthracene	1200		36	3.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Benzo[a]pyrene	1400		36	3.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Benzo[b]fluoranthene	1900		36	5.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Benzo[g,h,i]perylene	1300		36	5.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Benzo[k]fluoranthene	750		36	3.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Chrysene	1400		36	4.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Dibenz(a,h)anthracene	380 J		36	3.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Fluoranthene	2100		36	3.2	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Fluorene	140		36	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Indeno[1,2,3-cd]pyrene	1300		36	5.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
1-Methylnaphthalene	33 J		36	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
2-Methylnaphthalene	38		36	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Naphthalene	45		36	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Phenanthrene	1400		36	2.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Pyrene	1700		36	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:09	4
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	85			39 - 100			12/18/12 15:52	12/28/12 09:09	4

Client Sample ID: CV0511TT-CS

Date Collected: 12/13/12 10:24
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-24

Matrix: Solid
 Percent Solids: 74.1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1600		230	20	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Acenaphthylene	74 J		230	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Anthracene	2600		230	22	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Benzo[a]anthracene	9200		230	21	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Benzo[a]pyrene	9200		230	23	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Benzo[b]fluoranthene	12000		230	32	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Benzo[g,h,i]perylene	5700		230	37	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Benzo[k]fluoranthene	4900		230	22	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Chrysene	10000		230	25	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Dibenz(a,h)anthracene	1900 J		230	22	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Fluoranthene	20000		230	20	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Fluorene	1100		230	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Indeno[1,2,3-cd]pyrene	6500		230	37	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
1-Methylnaphthalene	79 J		230	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
2-Methylnaphthalene	77 J		230	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Naphthalene	70 J		230	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Phenanthrene	13000		230	15	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Pyrene	16000		230	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 09:28	25
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	0 X			39 - 100			12/18/12 15:52	12/28/12 09:28	25

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
SDG: 68085860-2

Client Sample ID: CV0266A-CS

Date Collected: 12/13/12 12:50

Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-25

Matrix: Solid

Percent Solids: 77.7

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	17	J	17	1.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Acenaphthylene	40		17	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Anthracene	92	J	17	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Benzo[a]anthracene	470	J	17	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Benzo[a]pyrene	850		17	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Benzo[b]fluoranthene	1300		17	2.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Benzo[g,h,i]perylene	570		17	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Benzo[k]fluoranthene	370	J	17	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Chrysene	890		17	1.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Dibenz[a,h]anthracene	120	J	17	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Fluoranthene	770	J	17	1.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Fluorene	24	J	17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Indeno[1,2,3-cd]pyrene	340	J	17	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
1-Methylnaphthalene	91	J	17	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
2-Methylnaphthalene	100	J	17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Naphthalene	74	J	17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Phenanthrene	450	J	17	1.1	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Pyrene	660	J	17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:41	2
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>		84		39 - 100			12/18/12 15:52	12/28/12 11:41	2

Client Sample ID: CV0266A-CSD

Date Collected: 12/13/12 12:55

Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-26

Matrix: Solid

Percent Solids: 78.0

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	79	J	34	2.9	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Acenaphthylene	14	J	34	2.7	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Anthracene	140	J	34	3.3	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Benzo[a]anthracene	780	J	34	3.1	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Benzo[a]pyrene	870		34	3.4	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Benzo[b]fluoranthene	1200		34	4.8	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Benzo[g,h,i]perylene	550		34	5.6	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Benzo[k]fluoranthene	430	J	34	3.2	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Chrysene	920		34	3.8	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Dibenz(a,h)anthracene	170	J	34	3.3	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Fluoranthene	1700	J	34	3.0	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Fluorene	55	J	34	2.6	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Indeno[1,2,3-cd]pyrene	610	J	34	5.6	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
1-Methylnaphthalene	18	J	34	2.7	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
2-Methylnaphthalene	22	J	34	2.6	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Naphthalene	19	J	34	2.6	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Phenanthrene	820	J	34	2.2	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Pyrene	1300	J	34	2.6	ug/Kg	☀	12/18/12 15:52	12/28/12 09:47	4
Surrogate		%Recovery	Qualifier	Limits		Prepared		Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>		83		39 - 100		12/18/12 15:52		12/28/12 09:47	4

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0266B-CS

Date Collected: 12/13/12 13:12
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-27

Matrix: Solid
 Percent Solids: 68.5

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	19		9.5	0.82	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Acenaphthylene	25		9.5	0.75	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Anthracene	73		9.5	0.94	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Benzo[a]anthracene	410		9.5	0.88	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Benzo[a]pyrene	490		9.5	0.97	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Benzo[b]fluoranthene	840		9.5	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Benzo[g,h,i]perylene	190		9.5	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Benzo[k]fluoranthene	280		9.5	0.91	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Chrysene	560		9.5	1.1	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Dibenz(a,h)anthracene	66	J	9.5	0.92	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Fluoranthene	670		9.5	0.85	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Fluorene	21		9.5	0.74	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Indeno[1,2,3-cd]pyrene	210		9.5	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
1-Methylnaphthalene	93		9.5	0.75	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
2-Methylnaphthalene	100		9.5	0.74	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Naphthalene	72		9.5	0.74	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Phenanthrene	360		9.5	0.63	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Pyrene	550		9.5	0.74	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:00	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	72		39 - 100				12/18/12 15:52	12/28/12 12:00	1

Client Sample ID: CV0266C-CS

Date Collected: 12/13/12 13:09
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-28

Matrix: Solid
 Percent Solids: 74.0

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	18		9.0	0.78	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Acenaphthylene	29		9.0	0.71	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Anthracene	76		9.0	0.89	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Benzo[a]anthracene	230		9.0	0.83	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Benzo[a]pyrene	230		9.0	0.92	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Benzo[b]fluoranthene	440		9.0	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Benzo[g,h,i]perylene	85		9.0	1.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Benzo[k]fluoranthene	150		9.0	0.86	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Chrysene	360		9.0	1.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Dibenz(a,h)anthracene	33	J	9.0	0.87	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Fluoranthene	340		9.0	0.81	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Fluorene	18		9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Indeno[1,2,3-cd]pyrene	87		9.0	1.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
1-Methylnaphthalene	520		9.0	0.71	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
2-Methylnaphthalene	560		9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Naphthalene	350		9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Phenanthrene	610		9.0	0.59	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Pyrene	290		9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:19	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	79		39 - 100				12/18/12 15:52	12/28/12 12:19	1

1 Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012).

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511AAA-CS

Date Collected: 12/13/12 13:34
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-29

Matrix: Solid
 Percent Solids: 78.1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	18		8.5	0.74	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Acenaphthylene	43		8.5	0.67	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Anthracene	80		8.5	0.84	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Benzo[a]anthracene	280		8.5	0.79	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Benzo[a]pyrene	320		8.5	0.86	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Benzo[b]fluoranthene	590		8.5	1.2	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Benzo[g,h,i]perylene	99		8.5	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Benzo[k]fluoranthene	230		8.5	0.81	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Chrysene	420		8.5	0.95	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Dibenz(a,h)anthracene	40 J		8.5	0.83	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Fluoranthene	540		8.5	0.76	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Fluorene	22		8.5	0.66	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Indeno[1,2,3-cd]pyrene	110		8.5	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
1-Methylnaphthalene	230		8.5	0.67	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
2-Methylnaphthalene	240		8.5	0.66	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Naphthalene	150		8.5	0.66	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Phenanthrene	450		8.5	0.56	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Pyrene	440		8.5	0.66	ug/Kg	⊗	12/18/12 15:52	12/28/12 12:38	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	78			39 - 100			12/18/12 15:52	12/28/12 12:38	1

Client Sample ID: CV0511BBB-CS

Date Collected: 12/13/12 13:33
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-30

Matrix: Solid
 Percent Solids: 81.3

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1700 J		210	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Acenaphthylene	24 J		210	16	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Anthracene	2700 J		210	20	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Benzo[a]anthracene	6900 J		210	19	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Benzo[a]pyrene	6600 J		210	21	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Benzo[b]fluoranthene	8200 J		210	29	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Benzo[g,h,i]perylene	3800 J		210	34	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Benzo[k]fluoranthene	3500 J		210	20	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Chrysene	7100 J		210	23	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Dibenz(a,h)anthracene	1300 J		210	20	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Fluoranthene	16000 J		210	18	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Fluorene	1200 J		210	16	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Indeno[1,2,3-cd]pyrene	4500 J		210	34	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
1-Methylnaphthalene	66 J		210	16	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
2-Methylnaphthalene	66 J		210	16	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Naphthalene	61 J		210	16	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Phenanthrene	13000 J		210	14	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Pyrene	13000 J		210	16	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:06	25
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	0 X			39 - 100			12/18/12 15:52	12/28/12 10:06	25

TestAmerica Savannah

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Sample results have been qualified by URs in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site.

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511BBB-CSD

Date Collected: 12/13/12 13:33
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-31

Matrix: Solid
 Percent Solids: 80.2

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.3	J	8.1	0.71	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Acenaphthylene	3.6	J	8.1	0.64	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Anthracene	12	J	8.1	0.80	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Benzo[a]anthracene	63	J	8.1	0.75	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Benzo[a]pyrene	73	J	8.1	0.83	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Benzo[b]fluoranthene	120	J	8.1	1.1	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Benzo[g,h,i]perylene	25	J	8.1	1.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Benzo[k]fluoranthene	43	J	8.1	0.78	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Chrysene	84	J	8.1	0.91	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Dibenz(a,h)anthracene	9.6	J	8.1	0.79	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Fluoranthene	150	J	8.1	0.73	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Fluorene	5.3	J	8.1	0.63	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Indeno[1,2,3-cd]pyrene	32	J	8.1	1.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
1-Methylnaphthalene	9.1		8.1	0.64	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
2-Methylnaphthalene	11		8.1	0.63	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Naphthalene	9.9		8.1	0.63	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Phenanthrene	76	J	8.1	0.54	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Pyrene	100	J	8.1	0.63	ug/Kg	⊗	12/18/12 15:52	12/27/12 16:58	1
Surrogate									
<i>o-Terphenyl (Surr)</i>	76			39 - 100					
							Prepared	Analyzed	Dil Fac
							12/18/12 15:52	12/27/12 16:58	1

Client Sample ID: CV0511CCC-CS

Date Collected: 12/13/12 13:36
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-32

Matrix: Solid
 Percent Solids: 78.5

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	7.0	J	8.3	0.72	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Acenaphthylene	4.0	J	8.3	0.66	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Anthracene	17		8.3	0.82	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Benzo[a]anthracene	84		8.3	0.77	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Benzo[a]pyrene	97		8.3	0.84	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Benzo[b]fluoranthene	150		8.3	1.2	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Benzo[g,h,i]perylene	32		8.3	1.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Benzo[k]fluoranthene	61		8.3	0.79	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Chrysene	120		8.3	0.93	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Dibenz(a,h)anthracene	13	J	8.3	0.80	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Fluoranthene	200		8.3	0.74	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Fluorene	6.9	J	8.3	0.64	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Indeno[1,2,3-cd]pyrene	42		8.3	1.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
1-Methylnaphthalene	8.6		8.3	0.66	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
2-Methylnaphthalene	9.8		8.3	0.64	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Naphthalene	10		8.3	0.64	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Phenanthrene	100		8.3	0.54	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Pyrene	140		8.3	0.64	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:17	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	80			39 - 100			12/18/12 15:52	12/27/12 17:17	1

Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012).

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511DDD-CS

Date Collected: 12/13/12 13:57
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-33

Matrix: Solid
 Percent Solids: 76.9

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.5	J	8.6	0.75	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Acenaphthylene	4.0	J	8.6	0.68	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Anthracene	9.3		8.6	0.85	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Benzo[a]anthracene	52		8.6	0.80	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Benzo[a]pyrene	60		8.6	0.87	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Benzo[b]fluoranthene	100		8.6	1.2	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Benzo[g,h,i]perylene	20		8.6	1.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Benzo[k]fluoranthene	37		8.6	0.82	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Chrysene	78		8.6	0.96	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Dibenz(a,h)anthracene	7.7	X J	8.6	0.84	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Fluoranthene	110		8.6	0.77	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Fluorene	4.0	J	8.6	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Indeno[1,2,3-cd]pyrene	26		8.6	1.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
1-Methylnaphthalene	8.6		8.6	0.68	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
2-Methylnaphthalene	10		8.6	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Naphthalene	9.8		8.6	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Phenanthrene	58		8.6	0.57	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Pyrene	80		8.6	0.67	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:36	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	77			39 - 100			12/18/12 15:52	12/27/12 17:36	1

Client Sample ID: CV0511EEE-CS

Date Collected: 12/13/12 14:00
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-34

Matrix: Solid
 Percent Solids: 72.2

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.7	J	9.0	0.78	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Acenaphthylene	5.3	J	9.0	0.72	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Anthracene	17		9.0	0.89	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Benzo[a]anthracene	88		9.0	0.84	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Benzo[a]pyrene	98		9.0	0.92	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Benzo[b]fluoranthene	160		9.0	1.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Benzo[g,h,i]perylene	30		9.0	1.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Benzo[k]fluoranthene	63		9.0	0.86	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Chrysene	130		9.0	1.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Dibenz(a,h)anthracene	13	J	9.0	0.88	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Fluoranthene	200		9.0	0.81	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Fluorene	7.8	J	9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Indeno[1,2,3-cd]pyrene	41		9.0	1.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
1-Methylnaphthalene	10		9.0	0.72	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
2-Methylnaphthalene	12		9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Naphthalene	11		9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Phenanthrene	110		9.0	0.59	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Pyrene	140		9.0	0.70	ug/Kg	⊗	12/18/12 15:52	12/27/12 17:55	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	82			39 - 100			12/18/12 15:52	12/27/12 17:55	1

1 Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama.

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511FFF-CS

Date Collected: 12/13/12 14:02
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-35

Matrix: Solid
 Percent Solids: 65.4

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	40		20	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Acenaphthylene	26		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Anthracene	110		20	2.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Benzo[a]anthracene	630		20	1.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Benzo[a]pyrene	880		20	2.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Benzo[b]fluoranthene	1200		20	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Benzo[g,h,i]perylene	560		20	3.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Benzo[k]fluoranthene	500		20	1.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Chrysene	850		20	2.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Dibenz(a,h)anthracene	180	J	20	2.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Fluoranthene	1400		20	1.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Fluorene	34		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Indeno[1,2,3-cd]pyrene	630		20	3.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
1-Methylnaphthalene	32		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
2-Methylnaphthalene	41		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Naphthalene	33		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Phenanthrene	610		20	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Pyrene	1100		20	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:25	2
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	79			39 - 100			12/18/12 15:52	12/28/12 10:25	

Client Sample ID: CV0511GGG-CS

Date Collected: 12/13/12 14:34
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-36

Matrix: Solid
 Percent Solids: 54.5

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110		60	5.2	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Acenaphthylene	49	J	60	4.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Anthracene	240		60	5.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Benzo[a]anthracene	2100		60	5.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Benzo[a]pyrene	3400		60	6.1	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Benzo[b]fluoranthene	4800		60	8.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Benzo[g,h,i]perylene	2000		60	9.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Benzo[k]fluoranthene	1900		60	5.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Chrysene	2900		60	6.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Dibenz(a,h)anthracene	710	J	60	5.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Fluoranthene	4400		60	5.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Fluorene	79		60	4.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Indeno[1,2,3-cd]pyrene	2400		60	9.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
1-Methylnaphthalene	50	J	60	4.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
2-Methylnaphthalene	55	J	60	4.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Naphthalene	51	J	60	4.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Phenanthrene	1600		60	4.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Pyrene	3500		60	4.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 10:44	5
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	83			39 - 100			12/18/12 15:52	12/28/12 10:44	5

1. TestAmerica Job ID: 680-85860-2
 2. SDG: 68085860-2
 3. Matrix: Solid
 4. Percent Solids: 65.4
 5. Dilution Factor: 2 (OTIE, October 2012)
 6. Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama.
 7. Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama.

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511HHH-CS

Date Collected: 12/13/12 14:33
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-37

Matrix: Solid
 Percent Solids: 74.4

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	250		45	3.9	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Acenaphthylene	38	J	45	3.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Anthracene	430		45	4.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Benzo[a]anthracene	1900		45	4.2	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Benzo[a]pyrene	1900		45	4.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Benzo[b]fluoranthene	2900		45	6.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Benzo[g,h,i]perylene	540		45	7.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Benzo[k]fluoranthene	1300		45	4.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Chrysene	2200		45	5.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Dibenz(a,h)anthracene	250	J	45	4.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Fluoranthene	4200		45	4.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Fluorene	180		45	3.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Indeno[1,2,3-cd]pyrene	750		45	7.4	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
1-Methylnaphthalene	57		45	3.6	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
2-Methylnaphthalene	62		45	3.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Naphthalene	86		45	3.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Phenanthrene	2500		45	3.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Pyrene	2900		45	3.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 18:52	5
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	75			39 - 100			12/18/12 15:52	12/27/12 18:52	5

Client Sample ID: CV0511III-CS

Date Collected: 12/13/12 13:32
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-38

Matrix: Solid
 Percent Solids: 77.6

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	55		17	1.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Acenaphthylene	15	J	17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Anthracene	100		17	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Benzo[a]anthracene	590		17	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Benzo[a]pyrene	840		17	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Benzo[b]fluoranthene	1200		17	2.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Benzo[g,h,i]perylene	400		17	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Benzo[k]fluoranthene	450		17	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Chrysene	780		17	1.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Dibenz(a,h)anthracene	140	J	17	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Fluoranthene	1300		17	1.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Fluorene	36		17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Indeno[1,2,3-cd]pyrene	480		17	2.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
1-Methylnaphthalene	23		17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
2-Methylnaphthalene	28		17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Naphthalene	26		17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Phenanthrene	630		17	1.1	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Pyrene	990		17	1.3	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:03	2
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	82			39 - 100			12/18/12 15:52	12/28/12 11:03	2

TestAmerica Savannah

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85860-2
 SDG: 68085860-2

Client Sample ID: CV0511JJJ-CS

Date Collected: 12/13/12 14:50
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-39

Matrix: Solid
 Percent Solids: 73.4

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	30		18	1.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Acenaphthylene	16	J	18	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Anthracene	57		18	1.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Benzo[a]anthracene	420		18	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Benzo[a]pyrene	610		18	1.8	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Benzo[b]fluoranthene	910		18	2.5	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Benzo[g,h,i]perylene	300		18	2.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Benzo[k]fluoranthene	330		18	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Chrysene	570		18	2.0	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Dibenz(a,h)anthracene	100	J	18	1.7	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Fluoranthene	960		18	1.6	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Fluorene	22		18	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Indeno[1,2,3-cd]pyrene	360		18	2.9	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
1-Methylnaphthalene	20		18	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
2-Methylnaphthalene	24		18	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Naphthalene	21		18	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Phenanthrene	410		18	1.2	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Pyrene	720		18	1.4	ug/Kg	⊗	12/18/12 15:52	12/28/12 11:22	2
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	73			39 - 100			12/18/12 15:52	12/28/12 11:22	2

Client Sample ID: CV0511KKK-CS

Date Collected: 12/13/12 14:56
 Date Received: 12/15/12 10:03

Lab Sample ID: 680-85860-40

Matrix: Solid
 Percent Solids: 72.8

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	21		9.1	0.79	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Acenaphthylene	10		9.1	0.72	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Anthracene	44		9.1	0.90	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Benzo[a]anthracene	230		9.1	0.84	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Benzo[a]pyrene	290		9.1	0.92	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Benzo[b]fluoranthene	480		9.1	1.3	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Benzo[g,h,i]perylene	91		9.1	1.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Benzo[k]fluoranthene	170		9.1	0.87	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Chrysene	320		9.1	1.0	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Dibenz(a,h)anthracene	36	J	9.1	0.88	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Fluoranthene	540		9.1	0.81	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Fluorene	15		9.1	0.71	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Indeno[1,2,3-cd]pyrene	120		9.1	1.5	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
1-Methylnaphthalene	18		9.1	0.72	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
2-Methylnaphthalene	23		9.1	0.71	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Naphthalene	21		9.1	0.71	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Phenanthrene	240		9.1	0.60	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Pyrene	380		9.1	0.71	ug/Kg	⊗	12/18/12 15:52	12/27/12 19:49	1
Surrogate							Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	71			39 - 100			12/18/12 15:52	12/27/12 19:49	1

Sample results have been qualified by URIS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTE, October 2012).

TestAmerica Savannah